WO 2005/068300 PCT/FI2005/000019

1

## ARRANGEMENT IN A WASTE CONTAINER

The invention relates to an arrangement in a waste container furnished with replaceable refuse sack and having a body supporting the refuse sack from the inside, the purpose of which is to keep the refuse sack by use open substantially in its largest size, when the refuse sack is together with the said body fitted into a waste container construction suitable for the purpose.

5

20

25

30

In known refuse bins the refuse sack is replaced inside the container body, whereby the refuse sack gets supported from the outside by use. In known solutions the body supporting the refuse sack from the outside is usually a solid wall of plate structure. The filled refuse sack is lifted from refuse bin or the container mantle or bottom is detachable, whereby the refuse sack can be removed without lifting it. By use the refuse sack is hidden inside the container.

When it is wanted to do a refuse sack embodiment, where the sack is visible, the wall that supports the sack may not be outside the sack. The supporting walls must be placed inside the refuse sack. If the replaceable refuse sack works also as advertising surface having advertising printings, the sack surface must be quite smooth and not creased, in other words, stretched to proper tightness.

Known are arrangements to facilitate removal off and fitting of the refuse sack. onto the body, for instance from patent publications GB 109676, US 3,983,914, US 4,037,778, US 6,179,150 and US 6,367,747.

The motive of the invention is to present a body supporting a refuse sack to be placed into a refuse sack, which body independently and automatically stretches the advertising surfaces of the refuse sack, whereby the refuse sack is still easily replaceable. The invention is characterized in that the inside body is formed of walls of plate structures or for instance of net structures, of which at least one wall can be moved by means of the force of gravity in order to increase the volume formed by means of said walls.

Characteristic for the other embodiments of the invention is that what is presented in the dependent claims.

The advantage of the arrangement according to the invention is that the refuse sack can be made an easily fitted and easily emptied sack although it is in usable position tense by means of bodies inside the refuse sack. By means of the arrangement at least a part of the bodies can be made movable as much as needed so that the refuse sack gets more tense by use and that on replacing the sack so much slack is formed that the refuse sack is easily put to rest on the body parts and removed from them. The shift of body parts to broader or the narrower position simply takes place automatically by means of gravitation, when another body is lifted.

In the following the invention is disclosed with reference to the enclosed drawing, where

Fig. 1 shows a body meant to support a refuse sack placed in a waste container.

Fig. 2 shows body 1 shifted into broader position,

15

Fig. 3 shows a portion of the refuse sack made tense by means of the body parts.

Figure 1 shows the body to be fitted in refuse bin in order to support the refuse sack. The body is made of an upper frame 1, from which opposite walls 2 go downward. Other walls 3 are loose from upper frame 1 and fixed to walls 2 by means of oblong diagonally fitted holes 4 and screws 5. Thus walls 3 can move outward and upwards from the Fig. 1 position as much as the distance of hole 4. Body parts 2 and 3 get inside the refuse sack. In an advantageous embodiment the refuse sack getting around the body parts remains for the most part visible and works as replaceable, when having advertising printings.

In figure 2 the body parts 2 and 3 have got upward and at the same time drawn away from one another. This happens, for instance, if body parts are placed on an even cover, whereby their bottom edges get on same height, which means upward rise of parts 3.

The enlargement part of fig. 2 shows a diagonally directed groove 4 for screw 5, the large screw-head does not fit through groove 4.

3

In figure 3 the body parts inside refuse sack 6 are at their most extensive, whereby parts 3 stretch the refuse sack into a square form. The printings on the refuse sack surface get then quite visible.

5

Instead of plate constructions parts 2 and 3 can be nets, especially sheets of net. Instead of square construction the body construction can be round or of some other shape.

10

Most suitably the body can be without bottom, whereby refuse sack 6 is removed pulling downwards and the refuse inside parts 2 and 3 fell at the same time into the refuse sack at the . The body parts are then in the position of figure 1. In this position also a new refuse sack 6 is mounted as replacement. In one embodiment still another refuse sack is placed inside the body parts, whereby a double protection for the residue is achieved.

15